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196 131F50 ap.2

Federal - State Cooperative
Snow Surveys and Water Supply Forecasts
for

OREGON





SOIL CONSERVATION SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE
AND
OREGON AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with the Oregon State Engineer, U.S. Forest Service, National Park Service and other Federal, State and local organizations.

-AS OF-

JAN. 1, 1954

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY AND WATER SUPPLY FORECAST REPORTS:

Forecasts by U. S. Weather Bureau of total annual streamflow October-September, inclusive, at more than 300 gaging stations are issued monthly January through May in the publication WATER SUPPLY FORECASTS FOR THE WESTERN UNITED STATES.

Weather Bureau forecasts of runoff presented in that bulletin are computed from procedures based on mathematical analysis of the relation between precipitation and runoff.

The Weather Bureau bulletins may be secured by writing to:

Hydrologist in Charge River Forecast Center U. S. Weather Bureau 712 Federal Office Building Kansas City 6, Missouri

For current information on local river and flood conditions, reference should be made to the appropriate River District Office listed below:

Meteorologist in Charge......Columbia River and Weather Bureau Office 320 Custom House Portland 9, Oregon

tributaries below Grand Coulee Dam, except the Snake River and tributaries.

Meteorologist in Charge.....Oregon and California Weather Bureau Airport Station Box 1072 Medford, Ore.

Coast drainage, from and including Umpqua River Basin, southward to and including Klamath River and tributaries; the Great Basin in Oregon

State of Oregon

235303

FEDERAL-STATE COOPERATIVE

SNOW SURVEYS AND WATER FORECASTS

FOR

OREGON

Report Prepared by

W. T. Frost, Hydraulic Engineer and Manes Barton, Assistant Water Forecaster

Issued

January 9, 1954

Soil Conservation Service and Oregon Agricultural Experiment Station 209 S. W. 5th Avenue Portland 4, Oregon



Location Elev. Sec.Twp.Rge.	INAGE	egon)	30 45N 66E 31 43N 64E	31 45N 56E 6600 18 42N 53E 6800 9 42N 53E 7250	65 SW 75 SW		46N 58E	25 45N 39B 8700 11 45N 39E 7200 33 46N 58E 6800	29N 46E 39N 66E	44N 68E		21 153 36B 5900 24 18S 34E 5375 10 18S 354B 5120 23 188 32B 5100	218 548	16 14S 36E 6950 6 12S 36E 6098 34 10S 35gg 5100		16 75 37B 7125 35 88 37B 5800 52 115 40B 6430 18 8S 58B 5430 34436 8S 38B 6775	35 6S 45B 6400	29 65 47R 4260	3	16 4S 45E 7480 16 4S 45E 7000 8 6S 57E 5540 53 6S 56E 5970 28 4S 54R 1800	3S 41B 8S 37B 6S 42B	
Name	UPPER COLDUBIA DRAINAGE	TO UI BYBUC TOMOT)	6 Big Bend 7 Fry Caryon	5 Gold Creek 9 Jack Creek, Lower 10 Jack Creek, Upper	c kodeo fat 12 Silver City 13 South Mountain No. 2 12 Perior Carron	owing courses are adjusted to Oryhee Drainage		1 Buckskin, Lower 2 Buckskin, Upper 2 Fox Creek 4 Canite Book	S Martin Creek Martin Creek Midas 11 Tremewan Ramb	4 76 Greek	MALHEUR RIVER	Blue Mourtain Spring Crane Prairie Lake Creek Rook Spring	Stinking Water	Burney Creek Blue Mountain Summit Tipton	POWDER RIVER	Anthony Lake Bourne Dooley Mountain Rilerteon Meadows Goodrioh Lake	PINE CREEK Schneider Meadowe	IMMAHA RIVER	GRANDE RONDE	Anaroid lake No. 1 Anaroid lake No. 2 Beaver Reservoir Camp Carson	Moss Syling Summit Springs Taylor Green	SNOW COURSES
Number			Nev.	Nev.	Ida.	(F)	on this	Nev.	Nev.	Nev.		133 136 136	135	143		155 154 156 151B	181	Ş	1	183 183 188 186 187	186A 184 185	
Name Location Elev. Sec.Twp.Rge.	LOWER COLUMBIA IRAINADE	WALLA WALLA RI VER	Tollgate 32 4N 36E 6070 UMATILLA RIVER	Raignant Springs 29 1M 35E 3925 Lioky Strike 28 3S 3S 82E 6060	EN DAY RIVER	Arbuckle Mountain 53 4S 29E 5400 Besch Greek Summit 4 128 50E 4800 Dixts Springs 2 9 11S 54E 5550 Grid Certer 2 9 5 55E	14 9S 35\frac{1}{2}E 28 4S 34B 20 155 31B	ROOKED RIVER	Labra Greek 25 128 198 4540 Ochooo Meadows 21 135 208 6200 Thurstool Meadows 8 158 268 4690	SSCHITTES BY URD	14 16S 9B	t 7 235 68 68 68 68 68 68 68 68 68 68 68 68 68	30 18S 11E 25 20S 6E	New Creaceat Lake 11 245 6E 4600 Mem Dutchman Flat 21 18S 9E 6400 Three Creeks Meadown 3 17S 9E 6600 Williamette Pase 21 24S 5gs 6600	LOWER DESCHUTES RIVER	Clear Lake 29 48 9B 3500 Engg Pase 24 138 728 4756 Rook Greek 1 48 10E 4200 HOOD RIVER	Brooks Meadows 2 25 10E 4300 Greenpoint Reservoir 28 2N 9E 5400 Rad Hill 21 18 9F 6400	16 25 9B	Phlox Point-lt. Hood 6 3S 9B 6800 Still Greek 26 3S 9B 8700			INDEX to OREGON
Number			212	222 223 11		241 248A Be 244 Be			341					326A Na 324A Na 3210 Tr 331 Tr 323 WH		361 E	451 Ba		452 Pi			
Number Name Location Elev. 1 Sec.Twp.Rge.	INTERLOR DRAINAGE	WARNER LAKE	911A Canna Creek 6 598 21B 6720 GUANO LAKR	Her, 1 Bald Mountain 17 45N 21E 6720	922 Mill Greek 1 345 178 8200	SILVEN LAIR 942 Silver Creek 25426 295 13B 4900	HARNEY BASIN Figh Creek 4 55S 35E	961A Idlowild Gamp 53 20S 31B 6200 964 Izee Summit 28 188 29B 6235 961 Sliving 55 28S 85B 6900 965 6	MODERATING ORESE	Neve 6 Disaster Peak 8 47N 34E 6500	GOOSE LAKE BASIN	811 Quartz Mountain 2 368 168 5320 OBEGON & CALFORNIA COAST DEATMARE	UMPQUA RIVER	743 Diamond Lake 29 275 6B 5315 742 No. Umpqua nr. Lake Cr. 19 26S GB 4215 741 Trep Greek 1 278 4B 3800 744 Whadigo Pass 20 25S 9B 6800	ROGUE RIVER	17 418 in 51 406 ivide 30 568 5 378 9 568	Grayback Peak 9 40S 5W Hobart Lake 17 40S 3B Hyatt Prairie Asservoir 15 39S 32	Little Red Mountain 25 405 218 Stragg Mountain 9 47N 10TH Seven Lakes No. 2 26 335 GE Sawn Lakes No. 2 26 335 GE	Silver Burn 30 30 4E Siekiyou Suzmit 17 40\$ 2E South Fork Canal 12 35\$ 3E	Magnor Butte 1 408 1M Whaleback 5 318 2E KLAMATH LAKE BASIN	831 Armie Spring 19 31S 6B 6018 834 Chemilt 2 177S 8B 4760 6211f. Gronder Flat 30 47N 11R 6200 835 Gerber 12 398 13B 4850 835 Lake of the Woode 11 37S 5B 4960 838 Park Beadourterer 8 31S 6R 6450	Stramberry 4 405 16E Summer Rim 16 555 15E Sun Mountain 22 525 72E Taylor Butte 16 555 11E
er Name Location Elev. Sec.Twp.Rge.	AILLAMBTIB RIVER BASIN	CLACKANAS RIVER	Big Bottom 26 68 78 2118 Clackamas lake 35 68 8\$5 3400 Take Barriat 4 68 78 2045	Peavine Ridge 14415 6S 7E SANTIAM RIVERS	Breitenbush 21 98 78 Detroit 1 108 58 Detroit Day 7 108		MCKENZIE RIVER	Dead Borse Grade 13 158 73 5800 Lost Creek Ranch 24 158 68 1745 MoKerie Deide 35 158 7½8 4900 Mercenia Deide 1777	White Branch Side 15 168 73	MIDDLE FORK WILLAMETTE RIVER	McCredie Springs 36 218 4R Meridian Dam 13 198 1W			Champion 12 235 1E 4500 Golden Curry Greek 1 235 1E 5136 I Layrg Greek ReS. 31 215 1E 1200 Manager Greek Res. 22 225 1E 140	MARY'S RIVER	Mary'e Peak		THE CALIFORNIA ORROON	POWENT COMPANY'S NIGHT STATIONS. KLAMATH LAKE EASIN (Oregon & Calif. Coast Drainage)	Beatty (COPCO) 22 363 12E 4500 Bly 101 Ranh (COPCO) 22 353 14E 4900 Chemit (COPCO) 34 345 7E 4187	Crystal (COPCO) 26 343 6E 4200 Rurinan Lodge (COPCO) 2 533 748 4450 Rirk (COPCO) 1 335 6E 4200 Rirk (COPCO) 1 335 7E 4535 AARe of the Rodd (COPCO) 15 375 5E 4960 Annew (COPCO) 2 31 118 4600	r Drainage)
Number			694	69.	655	557 652 652	3	632 534 531 531	533		626	626 624 623 623		628 628 6211 6210		641			KL	450%	408072	G.

PRELIMINARY WATER SUPPLY OUTLOOK FOR OREGON

January 1, 1954

Outlook for Oregon's 1954 water supplies, now accumulating as snow in the mountains, is favorable in spite of shortage of low elevation snow in many areas.

SNOW-COVER: Water content of mountain snow-cover averages 85 percent normal on 35 measured snow courses compared with 150 percent normal a year ago. Measurements above 5000 feet average 96 percent normal. Below 5000 feet the snow-cover is only 67 percent normal due to the balmy winter bringing rains rather than snow at low and middle elevations. Snow-cover varies from 120-135 percent normal on the Grande Ronde and North Fork John Day watersheds to a low of 40 to 60 percent normal on the Goose and Klamath Lake drainages and upper reaches of the Deschutes, Middle and Coast Forks of the Willamette.

Normally, about 35 percent of the total winter's snow is accumulated by January 1.

SOIL MOISTURE: Moisture content of watershed soils is excellent except for the Southeastern Oregon areas. Soils are mostly not frozen under the snow.

RESERVOIRED WATER: Stored water in the more important Oregon reservoirs exceeds records of the past 10 years. Total stored water in 22 reservoirs is 12 percent greater than last year and 27 percent greater than the 10 year average (1942-51). Holdover water from last year's irrigation season is greatest of record.

PRECIPITATION: State-wide precipitation¹, September through

December, averages about 95 percent normal (1942-51 period)

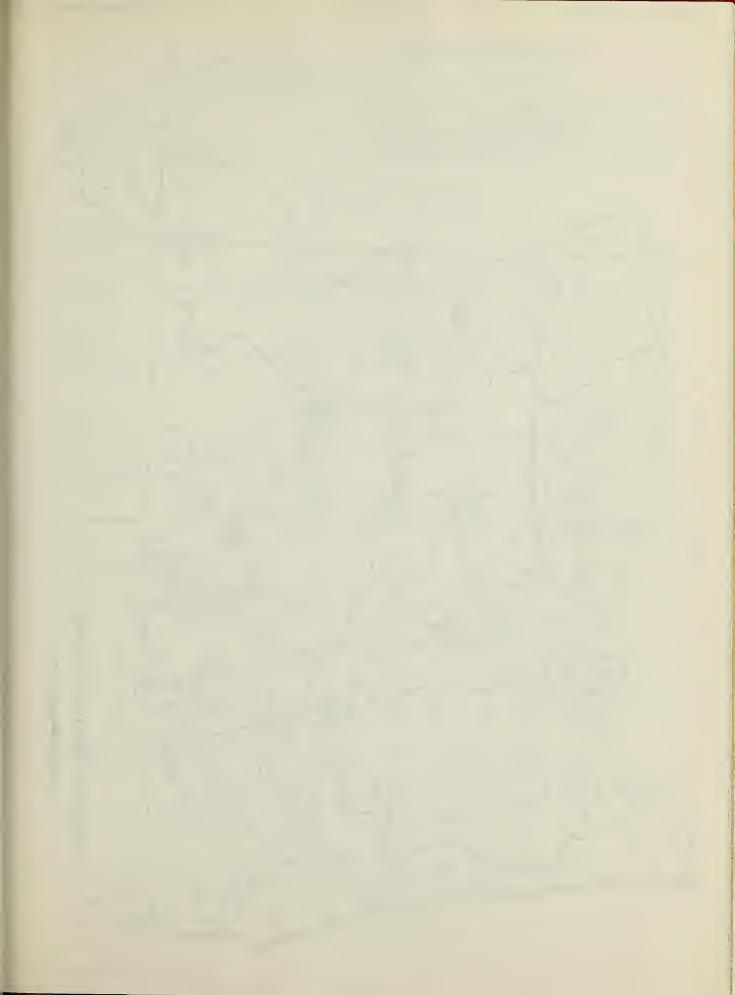
varying from 108 percent in Southwest Oregon to 68 percent in Southeast Oregon.

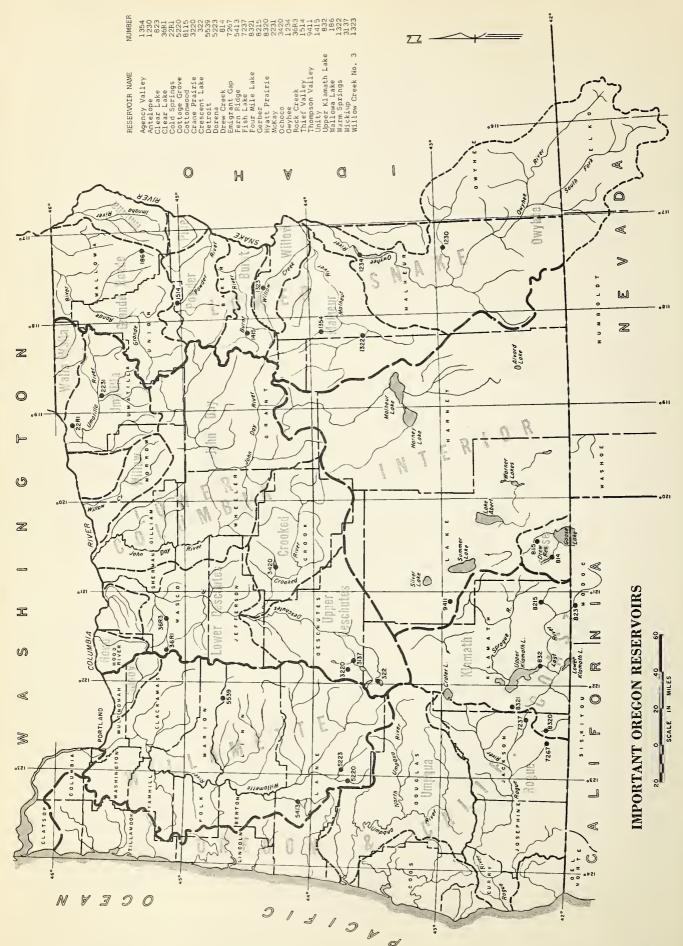
STREAMFLOW: Outlook for April-September streamflow is favorable assuming normal winter conditions prevail. Preliminary forecasts will be published beginning February 1. Streamflow October through December² has been much above normal. Flow of the John Day has been 205 percent normal (1921-45 period) and the Umpqua 270 percent normal. Flow of the Umatilla, and tributaries to the Snake, has been nearer normal.

1 From preliminary data furnished by U. S. Weather Bureau, Portland, Oregon.

²From preliminary data furnished by U. S. Geological Survey, Portland, Oregon.







STATUS OF OREGON RESERVOIR STORAGE - JANUARY 1, 1954

BASIN		USEABLE	T EOUS		UARY FI	RST	AGE ABOUT
and STREAM	RESERVOIR	(M A.F.)	1954	1953	1952	1951	10-Yr.Avg. 1942-51
			LUI BIA DI	RAINAGE	**************************************		
		Lower S	Snake in (regon			
Cyhee	Antolope	36.5	N.R.	6.7 ^f		11.7	mq ma
	Cwyhee	715,0		472.9	426.6	422.1	412.2
Malheur	Marm Springs	191.0	102.3	97.2	18.4	14.9	60.8
	Agency Valley	60.0	17,1	12.7	11.9	10.1	30.3
Burnt	Unity	25.2	2.0	3.0	4,8	7.3	7.3
Grande Rond	e Wallowa Lake	40.9	33.2	25.6	9.9	20.0	20.4
		LOWER CO	LU BIA DI	RAINAGE			
Umatilla	McKay	74.0	26.0	9.8	18.8	40.3	32.8
	cold Springs	50.0	19.7	9.5	23.3	30.7	23.2
Deschutes	Ochoco	46.0	30.6	19.2	21,7		
	rescent Lake	54,9	6.1	45.2		53.2	39.8
	rane Prairie	55.3	42.0	27.8 ^f	27.0		31.0
	Wickiup	180.0	173.6	125.2	137.6	153.8	69.3 ^d
Willamette	Jottage Grove	30.1 ^a	0.2	0.0	0.0	0.2	0.5d
	Dorena	70.5ª	0.2	0.1	0.8	0.5	
	Fern Ridge	94.2ª	0.1	0,2	0.6	0.1	5.0e
	Detroit	340.0ª	57.0	H.R.			
		AOC TOUT	ST DRAIN	AGE			
Rogue	Fish Lake	7.8	6.6	5.9	4.3	4.7	1.0
	Fourmile Lakeb	16.1	15.6	10.3	5.8	9.1	5.8
	Dmigrant Gap			2.7			3.8
	Hyatt Trairieb	16.1	11.2	9.5	2.5	3.7	3.9
Hlamath	Up.Klamath Lake	584.0°	407.8	317.3	410.4	403.6	279.7
			49.2				
	Jlear Lake	440.2	245.2	195.9	72.3	96.6	188.4
Goose Lake	Cottonwood	4.1	0.3	0.0	0.0	0.0	0.0
	Drew	62.5	36.2				

H.R. - Ho report

astorage space reserved for flood control.

bBy ditch to Rogue River side from Klamath drainage.

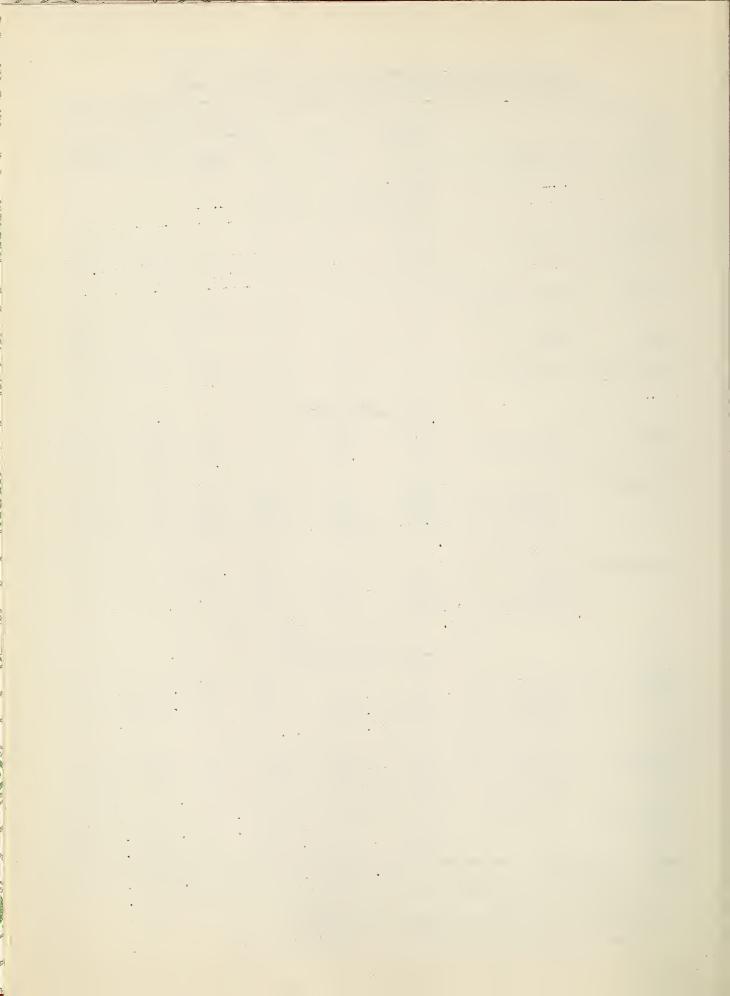
CBased on gage zero elevation of

^{4135.0.}

d₁₉₄₃₋₅₁.

e1944-51.

fPartly estimated.



COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Oregon stream basins presents the water content of the snow about January 1, 1954, as percent of the same date in 1953 and 1952 and average of record.

DRAINAGE	No. Cours Avera	es c		ry 1, 195 nt as per 1952	
UPPER COLUIBIA DRAINAGE (Lower	Snake	in Oregon)			
Owyhee River Halheur River Burnt River Fowder River Grande Ronde River	2 1 2 2 - 3	15 - 3 11 -	16 61 18 63	58 50 53 74 93	129 104 86 109 132
John Day River Deschutes River Willamette Valley Streams Clackamas River Santiam Rivers McKenzie River Middle Fork Willamette Rive Coast Fork Willamette Rive		12 - 12 - 13 - 15 -	16 49	85 46 58 39 49 57 35 26	119 69 100 84 71 76 60 52
Umpqua River Rogue River Rogue River Klamath Lake Basin Williamson River Sprague River Gerber-Clear Lake Basin INTERIOR DRAINAGE	1 6 - 7 13 - 1 8 - 9 4 - 5 1	10 - 15 13 - 13 - 14 -	27 25 26 26	27 36 26 21 9 20	71 65 58 49 25 52
Goose Lake Basin Harney Basin	1		14 20 17 57	20 43	52 92



			SNO	W COVER	MEASU	REMENTS		
			1954				cord	
No. or		Date of	Snow	Water Content				Years) of
tate	Elev.	Survey	(In.)	(In.)	1953	1952	Avg.	Record
PER	C O L I	u M B I	A D N OREGO	RAIN ON	<u>A G E</u>			
aho12 aho13	6400 6340		26.0 22.0	7.6 7.1	6,6 5.0	14.4 11.0b	6.6 4.8	7 9
133 134 135	5900 5100 4800	.12/29	10.5	2.7	6.9 4.4	5.4	2,6	18 16 10
156 141 142	5430 5098 5100	1/4 1/4 1/6	11.5 18.7 17.1	2.6 ^b 4.1 ^b 4.3 ^b	6.2 4.4 5.6		3.8	15 18 1
155 157 156	7125 6775 5430	1/4	11.5	2.6 ^b	6.2		14.7	4
151B	5400	1/1	17.7	4.1	7.0		4.4	11
	5340 4775	1/1	46.0 24.9 11.0	14.3 5.2 2.9	7.3 2.6 3.6	14.8 5.1 3.4	9.7 5.0 4.5	14 14
ER C	<u>o r n i</u>	BIA	<u>D</u> R A	TINV	G E			
155 245 133 141 248 142	7125 6000 5900 5098 4775 5100	12/31 Not 1/4 1/4	35.8 Measur 18.7 11.0	10.1 red 4.1b 2.9	6.9 4.4 3.6	11.4 11.0 6.0 3.4	7.1 6.1 3.8 4.5	17 18 18 3
	or tate PER ahol2 ahol3 133 134 135 156 141 142 155 186A 188 248 189 ER 155 245 133 141 248	or tate Elev. PER COLL LOWER 3 ahol2 6400 ahol3 6340 133 5900 134 5100 135 4800 156 5430 141 5098 142 5100 155 7125 156 5430 151B 5400 155 7125 186A 5850 188 5340 248 4775 189 4775 189 4775 189 4775 189 4775 189 4775	or tate Elev. Survey PER COLUMBINATE IN chol2 6400 1/2 ahol3 6340 12/30 133 5900 Not 134 5100 12/29 135 4800 No 156 5430 1/4 141 5098 1/4 142 5100 1/6 155 7125 1/2 157 6775 No 156 5430 1/4 151B 5400 1/1 155 7125 1/2 186A 5850 1/4 188 5340 1/1 248 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4 189 4775 1/4	1954 Date Snow of Depth tate Elev. Survey (In.)	No. Date Snow Water Of Depth Content	No. or tate Elev. Snow Water of Depth Content Water Survey (In.) (In.) 1953 PER COLUMBIA DRAINAGE Choice SNAKE IN OREGON Ch	Date Show Water of Depth Content tate Elev. Survey (In.) (In.)	No. Date Snow Water of Depth Content Water Content (In. tate Elev. Survey (In.) (In.) 1953 1952 Avg. PER COLUME IA DRAINAGE Chol2 6400 1/2 26.0 7.6 6.6 14.4 6.6 ahol3 6340 12/30 22.0 7.1 5.0 11.0b 4.8 133 5900 Not Measured 6.9 11.0 6.1 134 5100 12/29 10.5 2.7 4.4 5.4 2.6 135 4800 No Report 4.8 1.9 156 5430 1/4 11.5 2.6b 6.2 6.6 4.0 141 5098 1/4 18.7 4.1b 4.4 6.0 3.8 142 5100 1/1 17.7 4.1 7.0 4.4 155 7125 1/2 45.6 14.4 7.4 16.4 11.0 157 6775 No Report 14.7 156 5430 1/1 17.7 4.1 7.0 4.4 155 7125 1/2 45.6 14.4 7.4 16.4 11.0 186A 5850 1/4 46.0 14.3 7.3 14.8 9.7 188 5340 1/1 24.9 5.2 2.6 5.1 5.0 248 4775 1/4 11.0 2.9 3.6 3.4 4.5 189 4775 1/4 12.9 2.9 4.7 3.4 4.0 ER COLUMB IA DRAINAGE

^{*}Not located directly on this drainage area. bTelegraphic.

Secretary of the second .

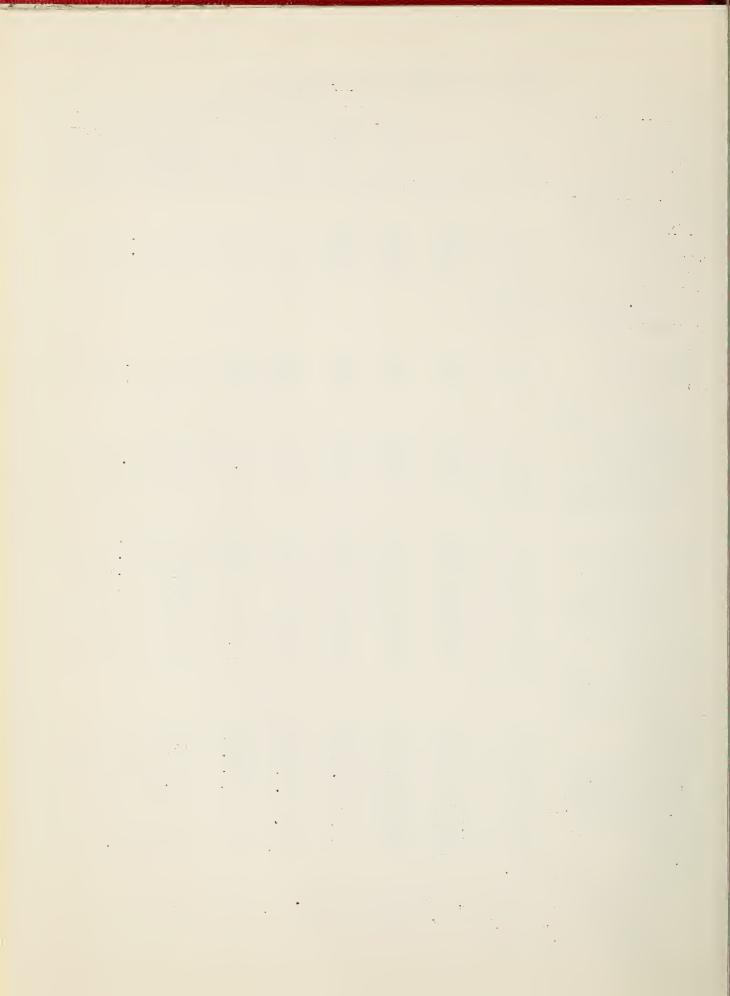
OREGON SHOW SURVEYS - ABOUT JAHUARY 1, 1954

				SPIC	M COVED	1 EASUREMENTS				
				1954	AL OWNER	ון טומשייו	Past Re	bros		
DRAINAGE BASIN	No.		Date	Snow	Mater		1 220 110	coru	Years	
and	or		of			Water	Content	(Tn)		
SHOW COURSE	State	Dlev.	Survey		(In.)	1953	1952		Record	
SPON COUNT	50408	TITO A.	Survey	(111.)	(711.)	1900	1302	Avg.	Mecord	
DESCHUTES RIVER										
Cascade Summit	321	4880	1/1	38.5	11.8	16.3	27.3	18.0	6	
*Chemult	834	4760	12/31	10.2	1.9	12.0	12.6	4.7	16	
Hogg Pass	35 1	4755	1/2	40.9	13.8	20.0	21.6ª	18.1	12	
WILLAMETTE VALLEY	STREAMS									
SANDY RIVER ¹										
Phlox Point	452	5600	1/4	92.5	32.2b	22.4	40.7	23.0	14	
Still Creek	451	3700	1/4	37.7	10.4b	12,6	19.2	8.8	13	
0.000	101	0.00	-/-				20,2	•••		
CLACKAMAS RIVER										
Peavine Ridge	591	3500	1/1	16.6	5.4	7.8	14.0	6.4	16	
Big Bottom	594	2118	1/1	0.0	0.0	4.1	5.0	3.3	3	
Lake Harriet	595	2045	1/1	0.0	0.0	2.4	2.5	1.6	3	
Snow Line: About SANTIAM RIVERS	2600-2700)1								
Hogg Pass	351	4755	1/2	40.9	13,8	20.0	21.6ª	18.1	12	
Santiam Junction	552	3990	1/2	27.2	8.0	12.8	16.9	10.5	12	
Marion Forks	553	2730	$1/\tilde{2}$	8.6	2.7	8.0	11.6	5.7	12	
Breitenbush	551	2325		easured			3.8	1.7	8	
Whitewater Bridge	554	2175	1/2	T	T	3.8	10.2	5.9	4	
Detroit (new town)	555	1500+	$\frac{1}{2}$	0.0	0.0	0.0	2.3	1.1	4	
Detroit Dam	556	1580	1/2	0.0	0.0	0.0	2.7	1.2	4	
Mill City	557	826	1/2	0.0	0.0	0.0	0.0	0.0	3	
Snow Line: About		0.00	-/-	0,0	0,0	0,0	0,0	0,0	· ·	
McKENZIE RIVER										
MaVanaia	F 77	4.000	30/00	70.0	17.08	7 C	70.0	21.0	7	
McKenzie	531	4800	12/28	36.6	13.9 ^a	15.9	32.6	21.0	3	
Hogg Pass	351	4755	1/2	40.9	13.8	20.0	21.6ª	18.1	12	
Santiam Junction	552	3990	1/2	27.2	8.0	12.8	16.9	10.5	12	
Dead horse Grade	532	3800	12/28	23.3	7.8	9.0	16.0b	9.8	3	
White Branch Slide	533	2800	12/28	T	T	4.7	5.0 ^b	3.6	3	
Lost Creek Ranch	534	1746	12/28	0.0	0,0	T		T	2	
McKenzie Bridge	5 35	1372	12/28	0.0	0.0	0.0	Tp	T	3	
Vida	536	800	12/28	0.0	0.0	0.0	0.06	0.0	3	
Snow Line: About	28001									

^{*}Not directly located on this drainage area.

1Not strictly a part of the Willamette drainage; these surveys are indicative of west slope conditions.

aPartially estimated.
bTelegraphic.



OREGON SNOW SURVEYS - ABOUT JAMUARY 1, 1954

	Show cover leasurements								
				1954			Past Re	cord	
DRAINAGE BASIN	No.		Date	Snow	Water				ars
and	or		of	Depth			conten		
SHOW COURSE	State	Elev.	Survey	(In.)	(In.)	1953	1952	Avg.R	ecord
WILLANDTTE VALLEY S	TREAMS	(Contid)	,						
MIDDLE FORK WILLA	LETTE R	IVER							
Cascade Summit	321	4880	1/1	38.5	11.8	16.3	27.3	18.0	6
Champion	522	4500	12/30	18.4	6.4	18.1	24.3	12.3	5
Salt Creek Falls	523	4000	1/1	21.2	6.4	8.4	13.4	8.8	4
Railroad Overpass	524	2750	1/1	T	T	1.6	3.0	2.6	4
McCredie Spring	525	2120	1/1	0.0	0,0	0.0	1.0	0.8	4
Oakridge	526	1310	1/1	0.0	0.0	0.0	T	0.2	4
Meridian Dam	527	750	1/1	0.0	0.0	0.0		0.0	2
Snow Line: About 2	7501						*		
COAST FORK WILLAN	ETTE RI	VER (Row	River)						
Champion	522	4500	12/30	18.4	6.4	18.1	24.3	12.3	5
Golden Curry Creek	528	3136	12/30	0.0	0.0	5.7	7.8	8,1	4
Weaver Creek	529	2440	12/30	0.0	0.0	0.0	2.2	0.7	3
Lund Park	5210	1740	12/30	0.0	0.0	0.0	T	2.5	4
Layng Creek R.S.	5211	1200	12/30	0.0	0.0	0.0	0.0	T	4
Snow Line: About 4	.000+								
	OREGON	AND CAL	IFORNIA	COAST	DRAINAG	E			
UNIPQUA RIVER									
Diamond Lake	743	5315	1/1	23.1	5.6	15.7	20.8	7,9	24
Champion	522	4500	12/30	18.4	6,4	18.1	24.3	12.3	5
ROGUE RIVER									
*Park Headquarters	838	6450	12/31	55.1	20.2	29.0	47.9	24.4	8
Scragg Mountain	7220	6200	12/26	8.6	3.9	21.8		11.2	10
*Annie Spring	831	6018	12/31	34.0	12.2	25.3	39.3		13
*Fourmile Lake	7223	6000	12/22	21.7	7.8 ^b				
Billie Creek Divide		5300	12/21	32.7	9.1 ^b		15.6b	10.0	13
Hobart Lake	7221	5010		0.0	0,0	7.7	6.3	5.8	4
*Hyatt Prairie Res.	723	4900	12/28	8.0	3.0	9.4	7.2	4.5	16
Fish Lake	725	4865	12/29		5,1 ^b	8,9	9.2b	5.5	14
Siskiyou Summit	728	4630	1/2	1.5	T	14.3	7.9	4.1	15
Silver Burn	7219	3720	12/31	8.6	3.0	12.0	10.2	4.3	16
South Fork Canal	7218	3500			Delayed	5.3b	3.4	1.5	15
								_	

*Not directly located on this drainage area. bTelegraphic.

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				G37/	OUE HOTELD	TO A CITY	NEW CONTROL				
					JW COVER	R MEASUREMENTS Past Record					
DDATIMAD BACTO	7.7		75 1	1954	777		rast ke	cora	Years		
DRAINAGE BASIN	No.		Date	Snow	Water	170400	.i.ut.aut	(Tm)			
and course	or	77.7 mm	of			Hater	Content 1952				
SNOW COURSE	State	Elev.	Survey	(In.)	(In.)	1953	1992	Avg.	Record		
KLAMATH LAKE BASIN											
ALAFAI A LAKE BASIN											
Park Headquarters	838	6450	12/31	55.1	20.2	29.0	47.9	24.4	8		
Annie Spring	831	6018	12/31	34.0	12.2	25.3	39.3	16.6	13		
Fourmile Lake	7223	6000	12/22	21.7	7.8 ^b			10,0			
*Quartz Iftn. (COPCO)	1220	5504	Measure			8.0	8,0°	3.3	23		
Sun Mountain	836	5350	12/29	17.9	4.8	19.8	22.1	11.7	14		
*Quartz Mountain	811	5320	1/1	5.8	1.7	8.3	8.3	3.3	14		
Billie Creek Divide	722	5300	12/21	32.7	9.1 ^b		15.6	10.0	13		
Lake of the Woods	835	4960	12/30	14.0	4.3b	10.2	10.4	4.1	17		
Lyatt Prairie Res.	723	4900	12/28	8.0	3.0	9.4	7.2	4.5	16		
Gerber	839	4850	Measure			3.9	3.0	3.1	4		
Bly 101 Ranch(COPCO)		4800	12/31	0.0	0.0	3.8	2,6	0.9	26		
Chemult	834	4760	12/31	10.2	1.9	12.0	12.6	4.7	16		
Yamsey (COPCO)	001	4600	12/31	T T	T		4.1	1.2	23		
Kirk (JOPUO)		4533	1/1	1.5	0.2	7.8	7.0	2.8	26		
Beatty (UOPIO)		4300	12/31	0.0	0.0	0.8	0.4	0.2	26		
Crystal (COPCO)		4200	$\frac{12}{31}$	6.5	1.8	9.9	9.6	3.6	24		
tarriman Lodge (COP	(0)	4200	12/31	2,5	0.9	6.8	6.5	2.0	26		
Chiloquin (COPCO)	<i>30)</i>	4187	12/31	0.0	0.0	3.7	3.9	1.1	25		
Fort Klamath (UOPUO)		4150	$\frac{12}{31}$	-		6.4	5.1	1.7	27		
1010 11101110011 (00100)		1.100	12/31	0.0	0.0	0,4	0.1	7.1	21		
GOOSE LAKE BASIN											
Quartz Itn. (COPCO)		5504	Measuren	nent De	laved	8.0	8.0°	3.3	23		
Quartz Mountain	811	5320	1/1	5,8	1.7	8,3	8.3	3.3	14		
qual of mountain	0.2.2	0020	-/-	0,0	 • •	0,0	0,0	0,0	7.7		
CHEWAUCAN RIVER											
*Quartz Mountain	811	5320	1/1	5.8	1.7	8.3	8.3	3.3	14		
,	0.1.1	0020	-/-	3,0		0,0	0,0	0,0	7.7		
HARNEY BASIN											
and the second											
Idlewild Camp	961A	5200	12/29	9.7	2,2	4.2	5.9	2.7	17		
Rock Spring	134	5100	12/29	10.5	2.7	4.4	5.4	2.6	16		
Stinking Water	135	4800	,	Report			4.8	1.9	10		
		2000	2.0				T , 0	T 9 0	10		

[&]quot;Not located directly on this drainage area.

(COPCO) - Water content determined by melting a measured sample (The California Oregon Power Co.'s Station).

CWater content questionable.



OREGON SNOW SURVEYS - DELAYED DATA

				SNO	W COVER	MEASU:	REMENTS	3	
				1954		Pa	ast Rec	ord	-
DRAINAGE BASIN	No.		Date	Snow	Water				Years
and	or		of		Content	Water	Conter	t(.In.)	
SHOW COURSE	State	Elev.	Survey		(In.)				
31 3. 0203			00.100		(=== /				
	D	ECEM	BER	1, 19	5 3				
VILLAMETTE VALLEY	STREAMS								
									
CLACKAMAS RIVER									
Peavine Ridge	591	3500	12/5	16.4	1.8	0.0	2.4	2.8	5
Big Bottom	594	2118	12/6	3.0	_			1.4	2
Lake Harriet	595	2045	12/5	0.0	0.0		T	0.4	2
Torro Inti I TO	999	2010	16/0	0.0	0.0		7	0.4	۵

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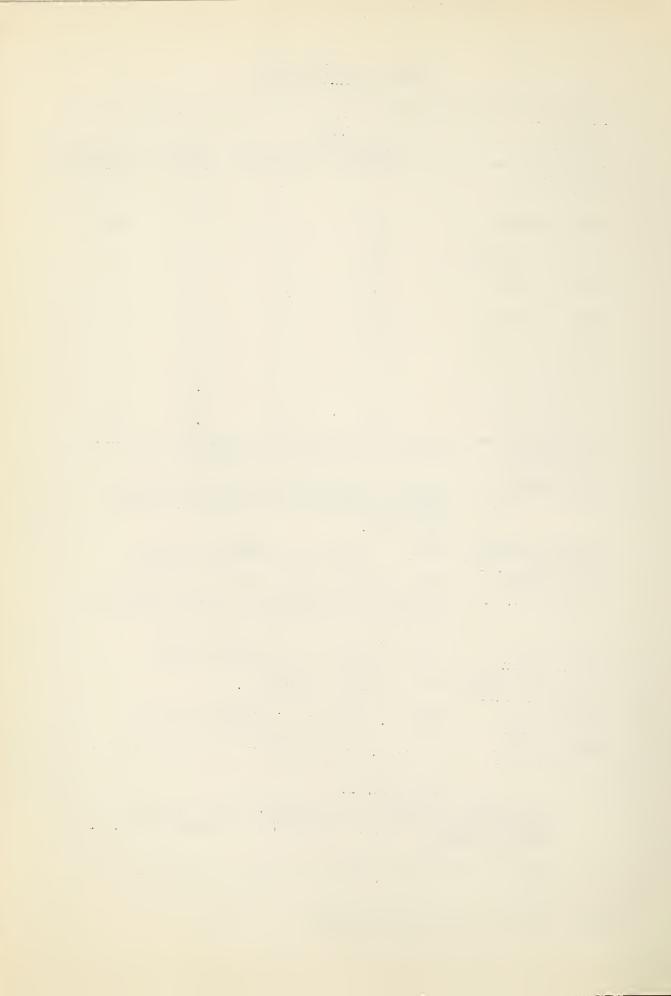
OREGON PRECIPITATIONa

DDA TILL OF			IL		2055
DRAINAGE DIVISIONS		SeptCot	Departure b	Average	Departure Departure
Southeastern		2,65	-1.15	1.35	-0.15
Blue Mountains		4.91	-1.76	2,60	+0.17
Wallowa Mountains		4.82	-1.58	2.06	+0.75
Lower Columbia		5.37	-1.79	2.52	+0.67
Upper Deschutes		3.94	-0.45	1.93	+0.29
Willamette Valley		17.04	-1.93	8.15	+3.13
Southwestern		7.63	+1,71	4.29	-0.70
South-Central		3.90	-0.34	1.84	-0.31
Southeastern	- Owyl	nee and low	er Malheur d	rainages.	
Blue Mountains	Malh	•	of the Umati he Powder, B	-	•
Wallowa Mountains	- Imna	ha, Wallow	a and Cather	ine draina	ges.
Lower Columbia	John	•	of the Walla eschutes, an		_
Upper Deschutes	- Uppe	r Deschute	s and Crooke	d drainage	s.
Willamette Valley	- All	Willamette	drainages.		
Southwestern	- Unpq	lua, Rogue	and Williams	on drainag	es.
South-Central	- Spra	gue, Lost	and Interior	Basin dra	inages.

Preliminary analysis by U. S. Weather Bureau from data furnished by Meteorological Services of Canada and U. S. Weather Bureau.

Departure from 10-year (1942-51) drainage division average.

Note - Precipitation shown in inches.



The following organizations poperate in the Oregon snow survey work:

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and corps of State Watermasters
Oregon State highway Engineers

FEDERAL

Department of Agriculture
Forest Service
Soil Conservation Service
Department of Commerce
Weather Bureau
Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Indian Service
National Park Service
Department of National Defense
Army Engineer Corps

PUBLIC UTILITIES

California-Pacific Utilities Company Portland General Electric Company The California Oregon Power Company

MUNICIPALITIES

City of Baker City of La Grande City of The Dalles City of Walla Walla

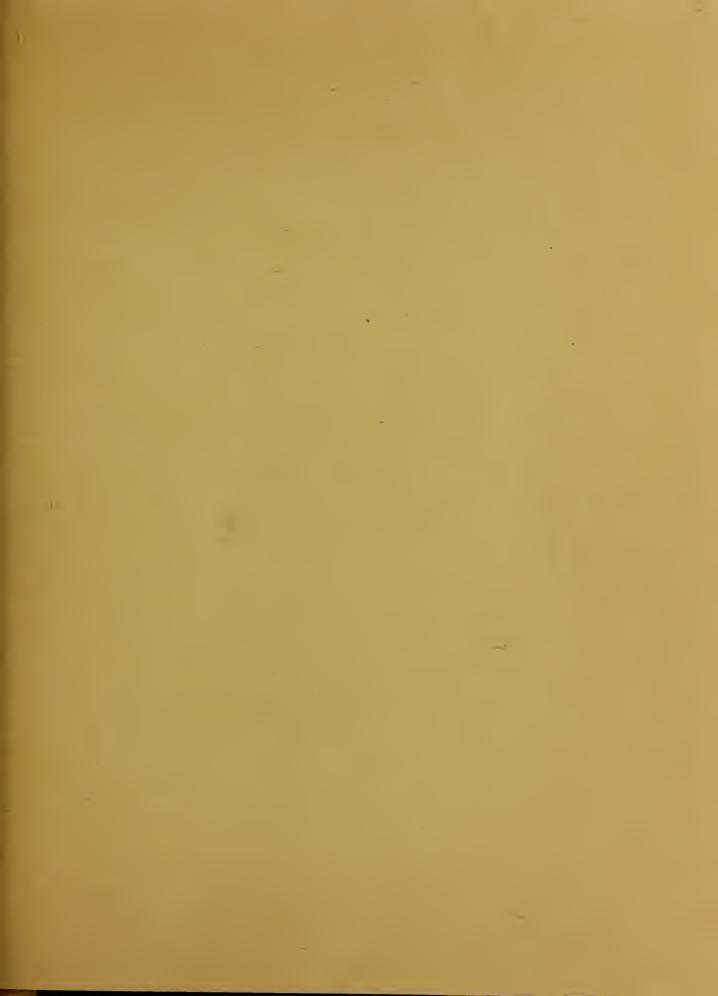
IRRIGATION DISTRICTS

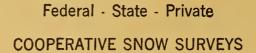
Associated Ditch Companies
Central Oregon Irrigation District
Deschutes County Municipal Improvement District
East Fork Irrigation District
Grants Pass Irrigation District
Jordan Valley Irrigation District
Lakeview Water Users, Incorporated
Medford Irrigation District
Ochoco Irrigation District
Rogue River Irrigation District
Talent Irrigation District
Vale-Oregon Irrigation District
Warmsprings Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company South Wasco Soil Conservation District The Crag Rats, Hood River, Oregon







Furnishes the basic data necessary for forecasting water supply for irrigation, domestic and municipal water supply, hydro-electric power generation, navigation, mining and industry

"WATER IS THE WEST'S GREATEST RESOURCE"